DOCUMENT RESUME

ED 075 298 SO 005 491

TITLE	Teaching Notes on Population.
INSTITUTION	Council for Intercultural Studies and Programs, New York, N.Y.; New York State Education Dept., Albany. Center for International Programs and Cooperative Services.
PUB DATE	72
NOTE	43p.
AVAILABLE FROM	Foreign Area Materials Center, 60 East 42nd Street, New York, New York 10017 (free)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Demography; Educational Strategies; Higher Education; Instructional Aids; Migration; Newsletters; *Population Education; *Population Trends; Resource Guides; Teaching Methods; Undergraduate Study; World Problems

ABSTRACT

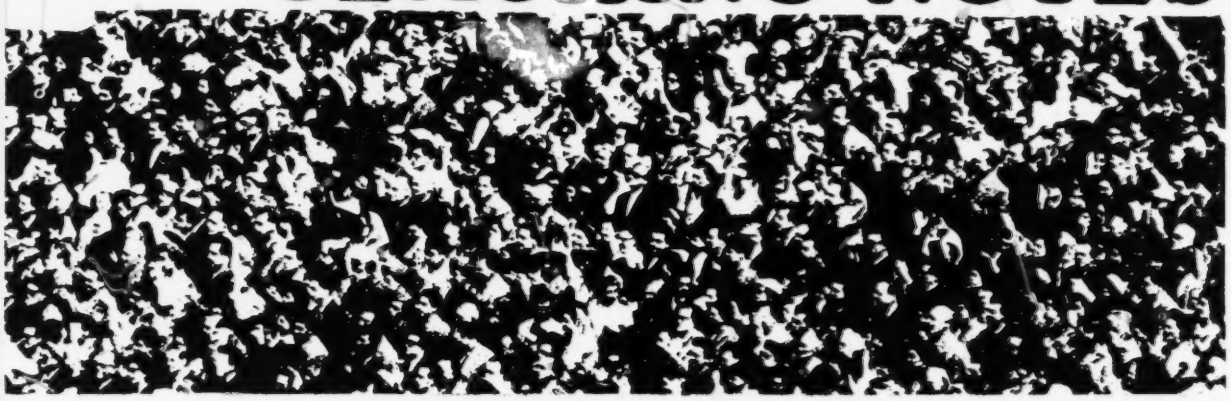
This newsletter is designed to serve as a clearinghouse for the exchange of ideas and information on new strategies of teaching and instructional resources about population in colleges and universities. The first article discusses some of the contemporary problems faced in teaching population studies to undergraduates. The second article outlines a strategy for introducing aspects of migration analysis to students, while the third selection is a review article that examines textbooks on population from the teacher's perspective. The issue concludes with information on a variety of instructional resources, together with some assessment of their value in classroom situations. (FDI)

FILMED FROM BEST AVAILABLE COPY

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Center for International Programs
Albany, New York 12224

ED 075298

TEACHING NOTES



ON POPULATION

SP005 491

Edited by the International Population Program
Cornell University

Published by National Council of Associations
for International Studies and
Foreign Area Materials Center

Spring/Summer 1972

TEACHING NOTES ON POPULATION

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

TABLE OF CONTENTS

Volume I (Spring/Summer, 1972)

Introduction to Teaching Notes.....1

Current Issues in the Teaching of Population.....4
Parker G. Marden, Cornell University

Why and Where People Want to Move; A Classroom Exercise in Analyzing Migration.....14
Michael J. Heit and Stephen L. Smith, Texas A&M University

Review Essay: Introductory Textbooks in Demography.....19
Michael A. La Sorte, SUNY at Brockport

News and Notes.....32

For additional information on "Teaching Notes on Population," your attention is directed to the following addresses:

Business matters (including subscriptions, etc.):
Miss Edith Ehrman, Manager
Foreign Area Materials Center
60 East 42nd Street
New York, N.Y. 10017

Editorial Matters (including submission of manuscripts):
Prof. Parker G. Marden
Editor
International Population Program
Social Sciences Building
Cornell University
Ithaca, N.Y. 14850

INTRODUCTION TO TEACHING NOTES

With this first issue of "Teaching Notes on Population," we would like to introduce a new venture concerned with the improvement of the teaching of population studies in America's colleges and universities. To be issued as an occasional newsletter, "Teaching Notes" is designed to serve as a clearinghouse for the exchange of ideas and information on new strategies of teaching and instructional resources for education about population. It is our hope that the newsletter will assist college teachers in serving the growing interest in population problems and in meeting the new challenges created by the growing importance of demographic forces in shaping the future of America and the world.

The establishment of "Teaching Notes on Population" was stimulated by a perceived crisis in undergraduate education concerning population studies. Contemporary world and domestic population growth have been paralleled by a burgeoning interest in population studies on the part of college undergraduates. This interest, however, has posed a series of problems for American institutions of higher learning. Demographers have traditionally been research-oriented and have paid little attention to the teaching of their subject on an undergraduate level. In addition, many colleges and universities have not been able to "afford" the services of well-trained population specialists as they attempt to de-

velop balanced instructional programs and the teaching of population studies has frequently become the responsibility of persons better trained and more interested in other topics. Recent concern for environmental issues has compounded these problems as students and faculty have focused new attention upon demographic variables. While such concern is certainly to be welcomed, it has meant that many demographic subtleties, best explored by those trained in the social sciences, have not received the consideration that they deserve. Similarly, many important questions have gone unasked and unanswered.

As a consequence, there is an important need for exploring the teaching of population studies in American institutions of higher learning. This situation takes on additional meaning with the recommendation of the Commission on Population Growth and the American Future that population education in the United States be strengthened as a strategy to prepare persons to cope with the demographic realities which lie ahead. This recommendation should serve to give added impetus to those efforts that are already underway to improve teaching of population issues in elementary and secondary schools. College-level education requires a companion effort. The fact that today's undergraduates, especially those who will enter teaching careers in elementary and secondary schools, are the very persons who will most need the understanding of population problems in the years immediately ahead only serves to underscore this necessity. It is our hope that "Teaching Notes" can make a contribution in this regard.

"Teaching Notes on Population" is a joint venture of the International Population Program of Cornell University and the National Council of Associations of International Studies (NCAIS) through its Foreign Area Materials Center. Financial support has been provided by the Population Council to permit free distribution of the newsletter to all who are interested in the improvement of undergraduate instruction in population studies.

In this first issue of "Teaching Notes," we have tried to suggest some of the kinds of materials that seem appropriate for use in undergraduate population studies. The issue begins with an article that discusses some of the contemporary problems faced in teaching population studies to undergraduates. Expanding upon some of the ideas outlined above, it seeks to open a needed dialogue on teaching issues

and other educational questions. The second article outlines a strategy for introducing aspects of migration analysis to students while the third selection is a review article that examines textbooks on population from the teacher's perspective. The issue concludes with information on a variety of instructional resources together with some assessment of their value in classroom situations. It is our hope that these selections provide information and raise questions that are appropriate to those concerned with the teaching of population.

"Teaching Notes on Population" is designed to be a newsletter that caters and responds to its readers by serving as a clearinghouse for their interests, needs, and ideas. Quite appropriately, funding for "Teaching Notes" is assured only for its first year and its continued existence depends upon the manner in which it fulfills readers' needs. This can best be assessed by the contribution of information and manuscripts from those whom it seeks to serve. While the first issue has necessarily been the product of a few individuals, we hope that "Teaching Notes" will become common property for all persons who are concerned with teaching about population dynamics and issues. Suggestions on the format and the concerns of "Teaching Notes on Population" and contributed materials, ranging from assessments of a particular film to reports on innovative instructional experiments, will be welcomed.

CURRENT ISSUES IN THE TEACHING OF POPULATION

PARKER G. MARDEN, CORNELL UNIVERSITY

With all due respect to those few persons who should be exempted from such a sweeping indictment, it does not seem unfair to state that demographers and others charged by the academic division of labor with the study of human population have been unconcerned with the teaching of their specialty. For most, population phenomena have been objects for research while instruction in their intricacies has been something reserved either for small groups of hardy graduate students in sociology, stigmatized by their peers as "social bookkeepers," or for a few undergraduates who needed three more credit hours for graduation. With student interest at this level, it may have been more appropriate for professors at major universities to concentrate their efforts on research (and perhaps the occasional production of another demographer in their own image) and for instructors at schools more concerned with undergraduate education to devote most of their attention to other courses.

In recent years, however, this situation has changed dramatically. There has been an explosion of student interest in population problems stimulated by a growing awareness of the magnitude and rapidity of population increase in general and by increasing concern for environmental consequences of population growth in particular. (It matters little whether or not there is actually a close link between the two problems). Like other segments of the general public,

students have sought information on population issues but the response has not been commensurate with their interest.

This situation has several causes. First, individual instructors have been unable or unwilling to abandon traditional methods of instruction suitable for a handful of specialized students and adopt new approaches for teaching large groups of students about population problems. Second, many institutions of higher learning have been caught without the human or financial resources to introduce population studies into the social sciences curriculum in a full-fledged way. As a result of these factors, as well as for more intellectual reasons, leadership in stimulating or building upon student concern about population has passed to biological and physical scientists or out of the classroom altogether.

Thus, the time has come to reassess the teaching of population problems within undergraduate education. The timing takes on added meaning in the light of the recommendation of the Commission on Population Growth and the American Future that population education programs be established "so that present and future generations will be better prepared to meet the challenges arising from population change." While the Commission emphasized elementary and secondary schools in their discussion of population education, assessment of the ways in which population studies are taught to college students is long overdue, given the number of students presently enrolled in colleges and universities, the leadership roles generally assumed by these college graduates, and the specific mission of many colleges to prepare teachers for America's classrooms.

This essay will seek to identify some of the problems that influence current undergraduate instruction in population studies. The examination is more one of diagnosis than one of prescription, however, and probably even the diagnosis should be confirmed by other opinions before treatment (or possibly surgery) is undertaken. Such opinions are earnestly solicited.

The problems involved in teaching undergraduates about population can be separated into two general categories, divided by time of appearance. Several seem to have "always" existed and have only grown in importance during the past several years. Others have appeared in this recent period

as a direct result of the growing and changing interests of students in population dynamics and policies.

One of the endemic problems is the difficulty of teaching demography in an interesting fashion to large numbers of undergraduates because of its technical nature and its heavy emphasis on facts and figures. It is indeed an unusual undergraduate who deliberately seeks to unravel the mysteries of life table construction and it is an unusual instructor who can present the Net Reproduction Rate for 17 nations in an exciting way. Even at the graduate level, generations of sociologists have been led into social psychology or urban studies by their resistance to the calculation of dependency ratios!

One could counter by observing that this situation describes demography and not necessarily a broader subject that might be called "population studies." Ignoring for a moment the various distinctions that students of population employ in positioning themselves in relation to others, this observation may indeed be true. But it raises a serious issue with respect to teaching. If an instructor seeks to be a "purist" in defining demography as the presentation of techniques and the results of empirical analysis, he faces the serious problem of losing student interest. Conversely, if a teacher "panders" to that interest by disregarding the critical analytical tools that demographers employ, he provides a basic disservice. To imagine the disciplined analysis of the important demographic issues and policies of the present and future without knowledge of cohort fertility or the distinction between fertility and reproduction rates, is quite impossible.

Even while still ignoring definitional questions, it is possible to contend that at the core of population studies there rests a set of basic demographic principles and concepts. The danger of ignoring such ideas can be seen frequently in the oversimplifications and inaccuracies concerning population advanced by militant ecological activists and some scientists who would recoil in horror if a demographer were to claim competence in their field!

This situation sets two tasks before persons who are concerned with population education on the undergraduate (or any other) level. First, the demographic core of population studies needs to be identified. What basic demographic concepts and techniques should be understood by various cate-

gories of undergraduates? Second, ways need to be explored which will present these ideas and procedures to students in an interesting, appropriate fashion. There may be little prospect for change as long as chalk and blackboards remain the ultimate forms of educational technology at many colleges, but it cannot hurt to anticipate the future.

A second problem which also transcends the contemporary growth of student interest in population but which has been heightened by this new interest is reflected in the undergraduate curriculum. Many institutions of higher learning, especially those that have undergraduate education as their primary mission, have simply not offered formal courses in population studies. In a recent survey of 537 four-year colleges, Reid and Bates found that less than half of the institutions included a course in demography (or "population problems") in their sociology programs -- its usual location at most schools (1971). If two-year colleges and other four-year institutions are added to those surveyed by Reid and Bates (and some adjustment made for the few institutions that include population courses in the geography curriculum or elsewhere), the number not offering population courses increases significantly.

But regardless of whether a college does provide such a course, would like to offer one, or has never really considered such action, its problems are often only variations on a theme. At many small colleges and universities, programs in sociology have small faculties. As a consequence, instructors must be called upon to teach a wide range of courses. Because of the technical character of demography as it is presently offered in most graduate training programs, many students who concentrate their advanced work in this field may lack such flexibility and the college sociology departments prefer faculty members who are more broadly trained. Either a course in population is not offered or a faculty member with little or no training in this area is called upon to teach it. With the growing recognition of the importance of population issues coupled with the difficult financial position of American colleges and universities, especially smaller ones, many faculty members may find themselves in this situation. This raises an issue of responsibility for those concerned with improving undergraduate education in population. How are these persons served? The answer to this question must consider other problems faced by many of these instructors, including large teaching

loads, limited instructional funding, and inadequate library resources.

In addition to these two problems, there are several that are direct consequences of the growing public concern for population growth. One with serious implications for teaching has been the transformation of demography (and "population studies") from one of the theoretically based empirical social sciences to a preoccupation with the public policy aspects of population change. This transformation transcends the previously discussed difficulties involving the identification of demographic methods and materials which are at the core of population studies or the development of new instructional strategies. Rather, the kinds of questions to be considered in analysis of contemporary population growth and distribution and the related issues of public policy have increased in dramatic fashion.

Perhaps this situation can best be introduced by considering the following statement on the implications of Marx and Malthus for contemporary demography in Bogue's Principles of Demography (1969), one of the most authoritative textbooks on the subject presently available.

> ... It is difficult to point to anything original, either methodological or substantive, in the writings of Malthus that can be cited as a major contribution of lasting influence in shaping either theory or research.... (p. 13).
>
> Karl Marx, the most powerful critic of Malthus, may also be dismissed as being largely irrelevant to the mainstream of modern empirical demography.... It is difficult to trace any lasting methodological or theoretical development to his influence, either directly or indirectly....(p. 15, emphasis supplied).
>
> The work of these two men is mentioned here so that it may be largely dismissed from consideration in the remainder of this book. The author would like to propose a slogan: "Demographers of the world unite--in burying the population theories both of Malthus and of Marx." (p. 17)

Bogue, of course, is correct in one part of his assessment: an understanding of Marx and Malthus as population strate-

gists is not a requirement for the mastery of empirical demography. But, perhaps regrettably, mastery of empirical demography is no longer enough to comprehend fully the implications of population in a rapidly changing and complex world (and one suspects that it never was). As long as some architects of population policy (or non-policy) operate from a Marxian or Malthusian stance, demographic questions that some might prefer to reserve for political economists should command more general attention. Indeed, they may be requisites for population literacy. As long as reports like the recent Limits to Growth (1972) take identifiably Malthusian stances, it may be important to recall intellectual ancestors.

Similarly, persons professionaly concerned with population problems must recognize that many others now share their interests, but not their scientific detachment. It will not be enough to assess the demographic accuracy of the work of the Commission on Population Growth and the American Future. Public reaction to its report, the societal and political context in which the Commission operated, and reasons for Congressional or Presidential action or inaction are now questions demanding attention. One suspects that students will raise such questions before many of their teachers will.[1]

A related problem, also resulting from growing public interest in population questions, concerns the new way in which such issues have been distributed among the various academic disciplines. Because of the explosion of scientific knowledge which has occurred in recent decades, a rather elegant division of labor has developed within the sciences. Since mastery of particular topics has become increasingly difficult, few scientists now venture beyond the perceived boundaries of their specialities.

Traditionally, the study of human population dynamics, including causes and consequences, has been "reserved" for demographers trained in the social sciences, most usually in

---

1. For an interesting account of the gap between students' interests and a teacher's concerns, as developed in his training as a graduate student in demography, see Godfrey's account of his first year of teaching. (1971).

sociology, with some selected aspects of this general area reserved for geneticists and various kinds of ecologists. Recently, however, it seems (to demographers at least) that the "rules" governing this academic division of labor have become inoperative and that everyone, either with an advanced degree or a soapbox, feels competent to discuss the intricacies of population dynamics. Conversely, what demographer would feel competent to speak publicly about butterflies or atomic physics? Perhaps because they feel less restrained by scientific caution and conservatism when they are operating in new areas, biological and physical scientists have become the spokesmen to the general public on population issues.

The circumstances surrounding this situation require careful assessment, but the consequences for teaching population need to be considered here. First, the interest of their colleagues in the natural and physical sciences should be welcomed by social scientists for several reasons. Not only have they attracted important public attention to demographic issues (and population experts themselves are at fault for their inability to do the same, thereby leaving the void to be filled), but biologists and non-social scientists have provided new perspectives on important questions. It was perhaps difficult to appreciate these qualities while the new friends of demography were operating with oversimplifications and erroneous information, but these difficult days seem to be passing. One needs only to compare what some have called the "new Paul Ehrlich" with his predecessor to appreciate what scientific communication and knowledge can do. There remains a problem for teachers, however, to sort out that which is of value from that which is not in public pronouncements on population in the past few years. Since students are more exposed to such information than to the journals in which disciplinary standards are well-guarded by processes of critical review, this is an important concern.

But there is another consequence of the biologists' interest in population that is of equal importance. As these persons recognized population growth as an important issue and as population scientists sought to assess and answer their contentions, the scope of demographic concern narrowed. To most, population growth was an important issue because of its alleged link to the environmental crisis and, if this was true, the demographic component to proposed solutions seemed obvious. But what about population-related

issues in other arenas? While increased concern was being expressed for the population component of environmental problems, for example, few were addressing issues concerning the demographic dimensions of international relations, foreign aid programs, or other topics. Further, concern for demographic variables other than fertility and population size was submerged under the weight of public attention to these "problems." With due respect to those who have maintained their research and teaching commitments in such areas, few have seemed concerned when teaching about population in college situations or in public lectures with assessments of infant mortality, consideration of problems and opportunities in population distribution, or even the problems of declining population growth in some nations. It is imperative, therefore, that balance now be restored and a broad spectrum of population-related issues be confronted both within and beyond the college classroom.

Finally, if the issues identified above are to be acted upon, problems of "elitism" must be confronted in assessing the teaching of population studies. For a number of reasons, including the historical development of the discipline and funding patterns for research, graduate instruction in demography is concentrated in a small number of major universities. There are good reasons for this concentration, not the least of which is the ability of such institutions to provide the breadth of instruction that produces the "compleat demographer." This situation and the realities of the current job market are strong arguments against the expansion of Ph.D. programs related to population studies throughout a wider range of academic institutions.

This argument will strike many, especially those at some growing state universities, as "elitism." The argument is correct. But why cannot reasonable allocations within academia be developed by which a few universities will produce research demographers and others will train Ph.D.'s who are comfortable in <u>teaching</u> population studies, while the rest can concentrate on their principal, announced mission - <u>teaching</u> undergraduates? (For those universities which need graduate programs to convince state legislatures that they are indeed entering the "big-time," perhaps the valuable job of producing M.A.-level research technicians for government employment or appropriately trained teachers for community colleges could be reserved).

Elitism, however, operates in two ways and arguments like that presented above can only be advanced if another aspect of elitism is corrected. For by concentrating the training of teachers of population studies in a small number of graduate schools, as is presently the case, the "Xerox principle" is operative. In addition to knowledge, training programs impart attitudes and values, including selection of the "interesting" questions. (It should be added that funding agencies play a large part in this process). But the demographic concerns of the students confronted by teachers at Berkeley, Cornell, or Wisconsin may not be the same as those faced by faculty at General Beadle State College or SUNY at Plattsburgh. Variations in the perceptions of demographic problems may be large and the needs of students may differ considerably. For many institutions of higher learning in the United States, the principal demographic question may be that of migration since the college itself may be but the first stop between the small town or farm and the large city. Similarly, student perceptions of problems of rapid population growth, not to mention the alleged side effects of high density, may vary by area and accordingly require different teaching strategies. This is an empirical question that requires investigation, but it can be contended that if only a few molds are to be used to produce trained and concerned undergraduate teachers of population studies, then they should be structured to provide consideration of such issues. Such a situation will occur only if those who profess concern about population come to value its teaching.

This essay has attempted to raise some issues that should be confronted by persons who are concerned with the improvement of undergraduate education in population studies. As noted at the outset, it is long on diagnosis and limited in its recommendations. Given the recentness of interest in population education at a collegiate level, perhaps this is appropriate. New approaches in teaching can only develop from an adequate and extended discussion and, hopefully, readers of "Teaching Notes on Population" will accept an open invitation to enter the dialogue.

BIBLIOGRAPHY

Commission on Population Growth and the American Future. Population and the American Future, (New York: New American

Library, 1972).

Meadows, Donella H. et al. The Limits to Growth, (New York: Universe Books, 1972).

Reid, Sue T. and Alan P. Bates. "Undergraduate Sociology Programs in Accredited Colleges and Universities," American Sociologist 6(May 1971), pp. 243-248.

Godfrey, Eric P. "Those First-Year Teaching Blues," Concerned Demography II(April 1971), pp. 29-33.

Bogue, Donald J. Principles of Demography, (New York: John Wiley, 1969).

WHY AND WHERE PEOPLE WANT TO MOVE: A CLASSROOM EXERCISE IN ANALYZING MIGRATION

MICHAEL J. HEIT AND STEPHEN L. SMITH,
TEXAS A&M UNIVERSITY

Within population studies, migration is an important but neglected social phenomenon. In the last analysis, however, the decision to migrate is an individual one. People come to this decision for many and complex reasons. One of the most critical is how they perceive other regions to which they might move. Do other regions offer better job prospects? A better climate? More attractive communities? How the individual answers these kinds of questions for his family and himself determines whether he moves or remains at rest. Thus, one important task for the systematic study of migration is the identification of persons' perceptions of greater net desirability or utility of other regions (Abler, Adams, and Gould, 1971: 519-525; Wolpert, 1965).

This concept of regional perception is a nebulous one and often difficult to explain to an undergraduate audience. The purpose of this note is to describe an exercise which helps to introduce residential preferences and their possible impact on migration in a way we have found is meaningful to undergraduates.

The perception of desirability of a region has meaning at a variety of levels, ranging from attitudes about individual neighborhoods within a city to international comparisons. This exercise is at an intermediate level: the perception of residential quality of the 48 coterminous states by the residents of any single state. The methodology could

be easily extended to other levels of comparison. Although we have referred to several basic works in the bibliography at the end of this article, those who wish to expand their understanding of this factor in migration might need access to Peter Gould's On Mental Maps (1966).

Persons in an individual household are, at least in theory, continually judging how well their current residence serves their needs. The decision to migrate grows out of this evaluation process (Lee, 1966; Taylor, 1969). As long as the utility of the current residence stays above a minimum threshold, there will be little reason for these persons to consider migration (Wolpert, 1965). If and when this utility drops below a minimum threshold of desirability or utility, they have a number of alternatives from which to choose (Brown, Horton, and Wittick, 1970): (1) acceptance of the current situation by decreasing their sensitivities to the undesirable or inadequate elements in the home environment, (2) modification of the home environment by attempting to change the undesirable or inadequate elements, (3) movement of the entire household to a new location, i.e., migration to an area perceived as more desirable. The migration may be to a larger house in the same city, to another city in the state, to a new state, or perhaps to another nation.

Once the decision to migrate is made, members of a household begin to look for a better location -- one which they perceive as having desirability above some threshold level. Those states viewed as undesirable are unlikely to be actively considered as a future household location.

In introducing this process, a simple classroom technique is needed whereby the student can visualize the class's mental map of residential desirability of the United States. We would like to suggest one that has worked well for us in several situations, both on the specific questions of relative desirability and on other aspects of the migration process.

Initially, the professor introduces the concept of the perception of spatial desirability (Gould, 1966). He then asks the members of the class to rank the states in terms of residential desirability ranging from the state in which they would most like to live to the one they find least desirable, assuming that they are free to choose among all the states and that employment opportunities and living costs do not vary between states. An alphabetical list of the states

should be provided for the students so that each student ranks all the states. This is preferable to giving the students a map for reference since the visual size of the state may have a greater impact on his choices than his attitudes towards that particular state. Gould suggests that this may be the reason for Rhode Island's consistently low ranking in terms of residential desirability. Similarly, Texas, Nevada, California and some of the other western states may stand out prominently in the mind of the student referring to a paper map because of their larger geographic size, as opposed to their relative importance on his mental map.

The relative importance that may be ascribed to those states at the top of a list is a topic which can be studied further. With an alphabetical list the professor can easily determine whether any student has simply replicated the hand-out list, in whole or in part, rather than putting down his actual preferences. This has happened several times in the authors' experience. These results were simply discarded and not used in the analysis.

Once the lists are compiled and collected, they can be analyzed in the following manner. The score assigned to each state by each student is recorded on a master list. The states' mean scores can then be easily determined and subsequently arranged from high score (least desirable) to low score (most desirable) and divided into several size classes and mapped on a base map prepared for overhead projection or for class distribution. The resulting map is a visual display of the aggregate mental map for use in classroom discussion. The authors have tried this method in four undergraduate classes with great satisfaction. Student interest was high and the maps seemed to prompt a great deal of discussion and verbalization about attitudes involved in deciding about the quality of different residential areas.

One set of data that was analyzed in this admittedly simple manner was also analyzed by Gould's technique (Gould, 1966). This method involves the performance of a factor analysis on the data and yields a series of factors that explain the variation in the choices. In the case of our data, as with Gould's, two factors were extracted. The first, identified as a cultural factor, explained 52% of the variance, and the second, a distance factor, explained an additional 22% of the variance for a total explained variance of 74%. The factor loadings matrix was multiplied by the original data, in the form of a rank order matrix, to

yield scores that were converted to a 0.0 - 100.0 scale and then mapped.

A major advantage in the use of factor analysis is that it recognizes the complex character of the perception of residential desirability by separating out a number of underlying factors. The two major factors found were the "culture" of the home state and the distance between the home state and the state under consideration. To obtain this level of sophistication, one is required to use a factor analysis routine and other methods involving complex data handling. The use of a computer and a program library is virtually a necessity. These facilities are not always available and several days of work in hand-manipulation of the data are usually required.

Thus, the simpler technique which we have used does have some attractions. The critical test of its value is how well it replicates the results of Gould's more sophisticated and presumably more realistic and reliable data handling. The two sets of data -- the scores from the use of factor analysis and the scores from our averaging technique, were correlated. The correlation coefficient found was 0.79 which is significant at the 0.01 level.

In summary, our scoring method has been shown to be a reliable substitute for a more sophisticated and complicated method. Our technique can be done on a hand calculator within a relatively short time (usually under one hour) and is readily understandable to nearly all undergraduates. In practice, the results have aroused interest and class participation and set the stage for a discussion of the role of perception by the individual in determining the places where he would most like to live.

BIBLIOGRAPHY

Abler, R., J. Adams and P. Gould, Spatial Organization: The Geographer's View of the World, Englewood Cliffs, N.J.: Prentice-Hall, 1971, pp. 519-525.

Bogue, Donald J., "Internal Migration" in Hauser, Philip and Duncan, Otis, eds., The Study of Population, Chicago: University of Chicago Press, 1959, pp. 486-509.

Brown, Lawrence A., Frank Horton and Robert Wittick, "On Place Utility and the Normative Allocation of Intra-Urban Migrants," Demography, Vol. 7, no. 2, May 1970, pp. 175-183.

Gould, Peter, On Mental Maps, Michigan Interuniversity Community of Mathematical Geographers, Discussion Paper Number 9, Ann Arbor: Department of Geography, University of Michigan, 1966.

Lee, Everett, "A Theory of Migration," Demography, Vol. 3, 1966, pp. 47-57.

Petersen, William, Population, 2d ed., N.Y.: Macmillan, 1969, pp. 252-306.

Taylor, R. C., "Migration and Motivation: A Study of Determinants and Types," in J. A. Jackson, ed., Migration, Cambridge: Cambridge University Press, 1969.

Wolpert, Julian, "Behavioral Aspects of the Decision to Migrate," Papers of the Regional Science Association, Vol. 15, 1965, pp. 159-169.

REVIEW ESSAY: INTRODUCTORY TEXTBOOKS IN DEMOGRAPHY

MICHAEL A. LA SORTE,
SUNY AT BROCKPORT

Ralph Thomlinson. Population Dynamics: Causes and Consequences of World Demographic Change, N.Y.: Random House, 1965.

William Petersen. Population, 2d ed., N.Y.: Macmillan, 1969.

Warren S. Thompson and David T. Lewis. Population Problems, 5th ed., N.Y.: McGraw-Hill, 1965.

Donald J. Bogue. Principles of Demography, N.Y.: John Wiley, 1969.

T. Lynn Smith and Paul E. Zopf, Jr. Demography: Principles and Methods, Philadelphia: F. A. Davis, 1970.

Calvin Goldscheider. Population, Modernization, and Social Structure, Boston: Little, Brown, 1971.

Peter R. Cox. Demography, 4th ed., Cambridge: Cambridge University Press, 1970.

It may seem odd to be writing a review of hardcover textbooks in demography when the very word "textbook" has

become an anathema to many faculty and students in the past few turbulent years on campus. Nonetheless, I venture forth on this mission in the hope that I might encourage the more recalcitrant instructors to make profitable use of textbooks in full-semester demography courses, minicourses, interdisciplinary seminars and "special problem" courses.

The central issue in the controversy of textbook usage has to do with the necessity of presenting to the student a thorough, systematic approach to the subject matter under consideration. The radicals on this issue argue inter alia that the ultra-sophistication of the modern student no longer requires the plodding pedantry of systematic learning. They come to college adequately prepared by home, peer, and media experiences to engage in a direct evaluation of the many social problems which beset our times without the systematic, detailed preparation required of their elders. At its most extreme, continued use of textbooks has been construed as an establishment plot to rid the campus of all malcontents by boring them to death. Clearly the health of the traditional textbook has taken a turn for the worse as witnessed by the audible moans emanating from publishing houses which enjoyed a captive clientele in the past. The one-time arrogance of sales representatives has turned to sheepish delight when the prospect of one or two sales looms large.

The starchy conservatives, on the other hand, remain anchored in place by insisting that students still need substantial grounding in facts and theory before they are ready to converse intelligibly on the many profound issues which surround us. This is particularly the case, they contend, with matters which, though aired continuously through the public media, are handled ineptly and simply, to the point where the observer receives fragmentary, chimerical information presented invariably in an alarmist fashion by those who are far from conversant with the often complex nature of the problem.

Both positions contain truths and semi-truths, and distortions result when overgeneralization is made of all students on all campuses. Some students do come to college prepared to engage in original and productive give and take with their instructors. A few schools are prepared to make a lasting dent on their students. But the kinds of media which influence the majority limit, rather than expand, their consciousness. The college remains the one location

where these students can get basic knowledge necessary for well-educated persons.

This is particularly true in demography. I have regularly found that the average student in my demography courses comes into class with a notion of population issues and with a few facts to accompany it gleaned from secondary sources (including other instructors), but with little understanding as to the actualities of the problem and realistic solutions to it. As a consequence, much class time is spent in remedial work, undoing what the student thinks to be true and replacing it with what I feel he must have before he can go off and pontificate.

The textbook remains the medium for this kind of instruction. I have tried the "mod" kind of "stream of consciousness, get-together" sessions, using a non-required "interesting" reading list, and have found to no one's amazement that the only thing learned by the student is what he suspected all along - that he had nothing new to learn in the first place.

In the past few years a number of good textbooks in demography have been published. To be sure, some are better than others, some read well, and others are pedantic and possibly too difficult for undergraduates. The selection is varied enough, however, so that a judicious instructor can find one that best fits the course requirements and the students' levels of interest and ability.

Thomlinson's Population Dynamics.

I am presently using Thomlinson and find that it satisfies my own pedagogic philosophy. The student does not get entangled in a mass of detail and the book can be read by the student without coaching. In fact, it is read and I have yet to receive any complaints. It is well-suited to the junior in four-year colleges, and I do not see why it could not work successfully in the community college.

Thomlinson begins by documenting the rapid growth of the world's population since 1650. In the first 69 pages he deals briefly with the three demographic processes, the demographic transition theory, data sources and population theories. His treatment of Malthus is somewhat unfortunate

in that he leaves the student with the impression that Malthusianism is now an historical curiosity that has been invalidated by subsequent developments and is consequently of little relevance to the present. His treatment of post-Malthusian population theory is too truncated to be meaningful to students. If the instructor wishes to emphasize historical demography, it would be necessary to supplement the first few chapters with lecture illustrations and outside readings.

The substance of the Thomlinson text is found in Part 2 where mortality, fertility and migration are discussed with verve and intelligence. In a few pages he aptly summarizes the probable causes of the decline in death rates over the past two centuries, modern morbidity trends, mortality and fertility differentials, and family planning. The techniques of demographic analysis are interspersed appropriately throughout Part 2. Only the essentials are presented and they are easily grasped by anyone who can add and subtract. Only three pages are devoted to the life table; a teaser which aggravates students rather than piquing their interest. As it is, few of my students can conceptualize the difference between a net and gross reproduction rate or comprehend that abstraction called the life table. These materials can be safely ignored, of course, without losing continuity, or, heaven forbid, your students.

Part 3 (Issues and Problems) uses what has been covered in Part 2 and makes application to the relationships among population growth, movement, composition, density and metropolitanization, resources, industrialization and political issues. Some of these materials are better handled in other courses. That which is more directly related to demography and not likely to be experienced elsewhere by social science majors is often lost in the variety of topics Thomlinson undertakes.

My experience with this textbook has shown that much of Part 3 is best handled in connection with the demographic processes. The discussion of national policies regarding pronatalism and family subsidies, as one example, makes a greater impact if read concurrently with the fertility chapters. It is more sensible to lecture on internal migration and urbanization as a single topic so that migratory movements are given more immediacy. Part 4, a review

of the 1960 United States census data[1], can also be integrated into the earlier chapters.

Thomlinson is sufficiently comprehensive to satisfy a number of classroom approaches. It contains more material than can be adequately covered in one semester. The book can be used as a basic introduction to demography by emphasizing Part 2, as I have done. Or if the students are "into" the population explosion, ecology and radiclib politics, Part 3 can serve as a backdrop for discussion of current national dilemmas and how they do or do not relate to population.

Petersen's Population.

There are major differences between Thomlinson and Petersen. The Petersen text not only is much more detailed in terms of explanation and illustration but also casts the material of demography into an explicit sociological framework. This results in the inclusion of materials not covered by Thomlinson or to which he only makes casual reference. The bibliographies at the end of each chapter are very extensive and many pictures and graphic illustrations nicely complement the textual material.

Most of the topics covered by Thomlinson are treated with greater sophistication by Petersen. These include techniques of analysis, the life table, population theory and population pyramids. Petersen gives an updated version of the demographic transition theory with amendments for the developing countries. An entire chapter is devoted

---

1. The book will soon need updating as the detailed results of the 1970 Census of Population become available, but this is a curse of all such demography texts (and other demographic enterprises).

to Malthus and optimum population ideas. There is a valuable discussion of the historical context within which Malthusian theory was developed and its subsequent revisions. Godwin's criticisms are juxtaposed with Malthus' thought to add breadth and depth. Petersen also notes the corruption of Malthus' writings that has carried down to the present.

Petersen's scholarly interests are sufficiently diverse that a few chapters appear to be independent of the text. Chapter 4 on subnations is one example. This chapter is more appropriate to a course (or text) in racial and ethnic relations. However, it does discuss concepts such as assimilation and integration and could be assigned along with the sections on migration.

As Petersen explains, Part 2 uses the demographic transition theory as a guide for arranging the chapters into a fairly explicit evolutionary framework. Starting with the most primitive societies, Petersen constructs a typology of societies which extends from pre-industrial to post-industrial to the modern totalitarian type of polity. The chapter on primitive societies, for example, discusses the economies, populations, and subsequent depopulation of the primitives after European contact. He assumes that populations of present nonliterate societies can be used as models of pre-Columbian non-Western societies.

Petersen then proceeds to take us on a tour of ancien Rome, the industrial revolution in England and Japan, urban-rural and modern underdeveloped population differentials and brief case studies of the populations of the U.S.S.R. and Communist China. He divides population dynamics along two planes, through time and space. Thus, the fact that modernization has taken place at different times in different nations at different rates with a variety of consequences is carefully delineated.

Petersen's text is in a second edition and is quickly becoming a standard in the field. It presents much more up-to-date information than other texts (e.g., the brain drain, recent inter-European population movement, and refugee migrations), and the versatility of the author is demonstrated on every page. This book can make inordinate demands on students' time and energy as well as on those of the instructor. I plan to adopt it for the fall semester despite certain misgivings about probable student reaction.

Thompson and Lewis' Population Problems.

Now in its fifth edition, the Thompson and Lewis text has weathered the decades since 1930 very well. This is a basic text in population (although it is no longer concerned with the problematic side of population) that rarely strays off the path of a systematic appraisal of what demographers know about the composition of population. It is instructive to look at the earlier editions to note the changes in subject priorities which have occurred over the years in demography. Eugenics and miscegenation, prominent features in the fourth edition (1953), are totally absent in the 1965 issue, whereas differential fertility remains a viable and growing topic.

The authors divide the text into five parts. Part 1 is devoted to a better-than-average discussion of Malthus and other theorists of lesser repute such as Doubleday, Gini, and George. Part 2 considers the socio-demographic attributes of populations, such as age, sex, and residence. Part 3 handles the major demographic processes and Parts 4 and 5 trace the history and impact of population growth on social, economic and political structures.

The stress is on the exposition of empirical data with a fair amount of cross-national comparisons. The chapters are divided into a number of subtopics (some of which are only a few paragraphs in length) and each is covered competently and tersely. The authors rarely carry their discussions beyond a presentation of demographic facts. In this respect, it is a textbook which is quite different from those of Thomlinson and Petersen. There are no overarching concepts, sociological or otherwise, to guide the discussion. The writing is smooth but does not rise above the level of formal, objective reportage. Student concentration may easily wander because of the arid prose. Its best use, I feel, would be in situations where the instructor wants to give students a hurried introduction tc census-type data or to search out topics for papers and seminars. The supplementary reading lists, tables and graphs present the student with easily grasped material with which to work.

Bogue's Principles of Demography.

Bogue's text is a hefty tome chock-full of demographic facts, figures, and other "goodies." It is big in scope and big in price ($16.95). The book was written with two purposes in mind, those of a textbook and a reference work. I find that it fulfills the first function admirably but misses the mark on the second. Bogue makes liberal use of international data and many of his tables are quite detailed raw census and vital statistics data, often of worldwide scope. In his attempt to cover the range of demography, however, he sacrifices depth for breadth.

Bogue states that his book is a "source of quick information on almost any topic of demography." This is not really so and possibly "quick" is the key word; it is easier than going to the library and digging out the very same reference material. There is much superficiality here. And there is a problem of timeliness as new census and survey results become available. His handling of methodology is cursory and the chapter on fertility control and family planning programs worldwide is nothing more than an outline, not to mention the fact that it is already outdated. Its main functions as a reference are the chapter bibliographies (although they are very dated in some chapters) and the convenience of finding a sampling of international data under one cover.

Because of cost and formidable weight, many instructors would not ordinarily consider this book as a class text. This would be unfortunate. The book's design as a combination reference-text gives much more than the conventional textbook to the student and many more options to the instructor. The extensive use of foreign data is a decided advantage in extending the horizons of culture-bound students. The tables of raw data can conveniently be utilized for term papers (especially where library resources are limited) or ignored, as the text can be read for the most part independently of them. A basic semester course need only cover about 400 pages of this 900-page book. Those chapters to be covered can differ from one semester to the next as instructor and student interests change.

The book is pleasant to read and the format is attractive. The arrangment of topics does not differ radically from a conventional textbook. Bogue makes the now standard case about rapid population growth with the United States as

an illustrative case. His chapters on population composition remind one of Thompson and Lewis. Much attention is paid to international comparisons regarding marital status, mortality, natality and migration. He includes a chapter on household characteristics, a subject seldom covered in introductory texts.

I have used this book in two seminars in ecology, as library reserve and required reading for students who were doing senior papers on topics in population.

Smith and Zopf's Demography: Principles and Methods.

The textbook by Smith and Zopf is designed to meet the requirements of a one-semester course in techniques and analysis. They argue convincingly that all undergraduates should have the opportunity to delve into a systematic introduction to population without the diversions which accompany the study of demography in the context of courses devoted primarily to another discipline. Accordingly, the text is directly concerned with the characteristics and vital processes of population and scant attention is given to the processes of urbanization, family planning, economic development, population policies and the like.

This is a volume which stresses heavily the presentation of substantive data both in context and in numerous tables and graphs. With the exception of a few cross-national comparisons, the bulk of data derive from United States census reports particularly of the past 20 to 30 years. The contemporaneity and provincialism of the approach and the brief nature of most chapters are legitimate limitations when the college curriculum can follow up by supplementing and expanding on the basic demographic facts presented here.

The formal-sounding title should not put you off. The writing is interesting and comprehensible throughout, and unlike Bogue, the tables and figures are composed of predigested data for easy consumption by any student aware of a two-dimensional tabulation. The authors have deliberately directed their message to the American college student enrolled in massive classes at large schools.

Goldscheider's Population, Modernization, and Social Structure. [2]

The work by Goldscheider is not a textbook in the conventional sense. Rather, it is a preliminary attempt to make general statements about the sociology of demographic phenomena and, in particular, to identify, elucidate and conceptualize connections between social and demographic processes. Therefore, it is long on theory and short on the analysis of empirical data. You will find no tables or figures illustrating population trends in this book. Goldscheider selects demographic data from bibliographic sources more to ground his theoretical propositions than as a means for describing population parameters.

Goldscheider makes a careful distinction between formal demography and his orientation which he calls "sociological demography" (similar to the more familiar term "social demography"). He utilizes the accumulated knowledge of population and social system analysis to seek answers to the query: "How do we improve our understanding of human society through the analysis of population processes?" When one cuts through the verbiage, the core proposition which establishes the book's framework is allied with the concern of every social demographer, namely the mutual interdependence of the realities of population and everyday life.

By focusing on the interactions of the demographic processes he generates thirteen models of population change as an initial step in identifying changes in the aggregate. He then suggests disaggregating each change down to the individual in order to tap the sociological significance of the event. He puts it this way, "The sociologist is often interested in the movers rather than net movement." The demographic transition model is used to illustrate the many socio-economic changes which accompany the decline of births and deaths. To find which changes precede and can be assumed to be causes of other changes becomes the task of the sociological demographer.

---

[2] This is the newest of the six books covered and, accordingly, it may be unfamiliar to most instructors as yet. Therefore, Goldscheider's book has been reviewed in some detail to permit readers to assess the value of its approach for their purposes.

In order to give the reader a flavor of Goldscheider's analysis, I shall summarize briefly his approach in Chapter 5 to the mortality revolution. Goldscheider marshals evidence to demonstrate that the reduction of mortality over the past few hundred years is a result of the processes of modernization and health technologies and this, in turn, has facilitated social and economic development and changed the socio-cultural aspects of some of our basic institutions.

First, he takes mortality as the dependent variable and reviews major factors which presumably have lead to the mortality decline. The history of Europe is divided into two eras: pre- and post-industrial. The pre-industrial era was characterized by high levels of death where mortality was in large part uncontrolled. The positive checks of famine, plague and endemic diseases kept rates high, as proven by the available evidence of low life expectancy and the very high crude death rates and infant mortality rates. He gives numerous empirical examples of the high rates of death in a variety of countries. With the onset of industrialization, particularly by the mid-nineteenth century, the traditional killers of man began to recede from the scene. Life expectancy increased, fetal loss and infant mortality declined, and the median age of populations increased.

This development was predominately a Western phenomenon and took place over many decades. The same process in the developing countries was more in the nature of a true revolution, and once Western ways were established in these countries, death indicators dropped precipitously. In the contemporary era, there is some evidence of a convergence of parameters of mortality between the modern and non-modern nations. Goldscheider suggests that although the initial impact on death rates came from social and economic developments, since 1930 further reductions in mortality were and are no longer dependent on these factors. Many nations today without large-scale urban-industrial development have comparatively low death rates which continue to drop.

From the historical evidence he postulates two models of mortality control. First, he states the familiar idea of the general relationship between socio-economic development and mortality reduction. He hurriedly qualifies this statement by noting that it is a "long run" relationship, a sufficient condition for mortality regulation but not a necessary one. His modernization model, therefore, holds for demographic developments prior to the 20th century.

The second model is called technological-diffusion. It refers to the spread of medical and public health technologies to the lesser-developed countries. Not only is the second model a crucial qualification to the modernization model, but it serves also to indicate that two demographic transition models differing in time, location, and conditions are needed to explain mortality (and fertility) reductions in the Western and non-Western countries.

His second approach, i.e., conceptualizing the mortality decline as an independent variable, is not as convincing. This is sociologist Goldscheider's contribution to mortality analysis, for it is customary to take the variables from one's own field of inquiry as the independent, explanatory factors. He discusses the effects of the mortality revolution on the family, religion and the economy. For example, he argues that the small family system is only possible under low mortality conditions and where death rates are high, you will find appropriate institutions which organize around the demographic reality of large families.

Goldscheider makes extensive use of the literature (and he refers frequently to Bogue's book). His own contributions in terms of original analysis are minimal. Sociologists will take comfort in meeting an old friend, structural-functionalism. Demographers should take umbrage at the implicit assumption that historical population data at this stage are sufficiently reliable to be used for theory building. There is some difficulty in following his argument. It is unnecessarily repetitious in parts and obtuse. He sets a frenetic pace for the reader. To be sure, the subject matter is complex, but it would appear that he wrote the book in hopes of separating the wheat from the chaff.

I do not want to leave the impression that the book is not worth reading. It is. His empirical examples are eclectic and his theoretical arguments are worthy of further discussion. The problem lies in its use in the classroom. It is not an introductory text nor would I advise its use with average students at the senior level. With well-motivated students it could possibly work in a seminar setting where the instructor is willing and able to run carefully through the book with his students. Although the instructor may consider the effort worthwhile, it is not likely to leave a lasting impression on the student.

Cox's Demography.

If your tastes run to the unusual you might want to take a look at the work of an English demographer, Peter Cox. Unlike its American counterparts, it is more methodological in content; it is much more compact; and refreshingly, it is not slavishly dependent on United States data sources. His treatment of demography with data for England, Wales, Australia, and India is always instructive and oftentimes exciting. This book would be worthwhile for students with a penchant for qualification.

I have tried in this review to keep in mind some of the variables to be found in the teaching setting. Those who write textbooks and those who use them are two very different kinds of academicians, existing in two very different work environments. The first are often scholars who may seldom find themselves in an undergraduate classroom and the others are the teachers who always find themselves there. This division of labor is inevitable and often dysfunctional since the two groups rarely communicate with each other about the real relationships between textual materials and students' values, interests, and abilities. It is particularly important at this time when the study of population is beginning to take root in a number of disciplines that teachers be in a position to make their views known during the torturous process of creating a new text and not after the finished product has been placed in our hands.

NEWS AND NOTES

New Major Reports on Population

The first three months of 1972 have been marked by the release of three major reports concerning population, one in Great Britain and two in the United States. Each report has generated considerable discussion and controversy and each deserves the attention of teachers and students concerned with population problems. In a subsequent issue of "Teaching Notes," we shall undertake to assemble bibliographies on each of these reports, including reactions to them, in the hope that these will be of value to teachers who will use the reports in the classroom. As a beginning, it seems appropriate to call attention to the reports and their availability.

The Ecologist, a new British journal concerned with environmental problems, has published an article entitled "A Blueprint for Survival." The report was prepared by five of its staff members and endorsed in its basic principles by 33 prominent scientists. Among its basic recommendations is the call for eventual reduction of the population of the United Kingdom to 30 million, well below the present figure of 56 million. The 22-page statement and 20 pages of appendixes can be found in The Ecologist 2 (January 1972), pp. 1-22, 24-43. Future issues of The Ecologist will in-

clude elaboration on implications of the report and discussion of tactics required to foster its adoption. For a preliminary assessment of reactions to "A Blueprint for Survival," one should refer to Nature, the British scientific publication, and later issues of The Ecologist.

The second report, The Limits to Growth, (New York: Universe Books, 1972), was released in March 1972. It was prepared for the Club of Rome's Project on the Predicament of Mankind by a group of M.I.T. researchers headed by Dennis L. Meadows. Using methodologies for forecasting developed by Jay Forester, the report deals with problems of growth in a variety of areas, including population, technology, and resources, as well as the present and future state of global equilibrium. In some circles, The Limits to Growth has become extremely controversial and for this reason as well as for its basic message, it is important reading. Again, initial reactions to the report can be found in Science (various issues) and Saturday Review (April 22, 1972, pp. 65-70).

While the first two reports concentrate principally on relationships between population growth and environmental (or resource) problems, the third is far more inclusive in its mission. Population Growth and the American Future is the final report of the Commission on Population Growth and the American Future. The Commission, chaired by John D. Rockefeller III, was charged by the President and the Congress to examine the dimensions of population in the United States and their "pervasive impact ... on every facet of American life." Released during March 1972, the Report has already received wide public attention and reaction and action will continue over the next several years. It is required reading for anyone concerned with population both because of its demographic sophistication and its recommendations for governmental policy. Copies of the Report are available from the U.S. Government Printing Office or as a Signet Book (New York: New American Library, 1972), on many newsstands as a $1.50 paperback.

For those teachers who wish to teach about population problems in an issue-oriented way, these three reports should provide an inexhaustible source of ideas.

Bureau of the Census Series, "We the Americans"

A potentially valuable teaching resource is the series of thirteen reports from the 1970 Census of Population that will be published for educational use by the Bureau of the Census. "Who We Are," the first booklet in the series, has just been released. It summarizes a number of important 1970 census results in sixteen pages which combine photographs, simple graphs and tables with a brief narrative. The booklet focuses principally upon the distribution and redistribution of the population of the United States (and its various sub-areas). Appropriate facts are assembled in an interesting, convenient manner. Although the format (including "the use of bright, psychedelic colors") is designed to appeal to high school students, "Who We Are" and others in the series should be usable in many college courses, especially introductory courses in the social sciences. At the very least, the booklets should suggest to instructors various ways to present census results in a palatable way.

Other booklets in the series will deal with such subjects as Housing, Blacks, Persons of Spanish Language, Youth, Women, Immigrants, Our Jobs, the Elderly, Schooling, and Income. Single copies of "Who We Are" and the other booklets to be published in the series, "We the Americans," can be obtained for 35¢ from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Field Staff Perspectives on Population

A series of ten reports on the impact of population problems on society has been prepared by the American Universities Field Staff, an independent educational organization specializing in foreign area studies. Based upon the work of AUFS field researchers, the series includes the following titles:

"Population Policies in Socialist Yugoslavia"
"Rising Expectations-Crisis for the Philippines"
"Malawi's Field Full of Folk"
"The United Nations System and Population Problem"
"Brazil: Population, Development, and the Dream of

Greatness"
"Japan's New Population Politics"
"Bolivia's Population - Challenge to Develcpment"
"Singapore: The Case for Efficiency"
"The Dynamics of Population in Afghanistan"
"Kenya: Pioneer in African Family Planning"

In the diversity of these reports lies the series' greatest strength. A variety of population problems are considered, ranging from the high rates of population growth and ambivalence toward population policy in Brazil to concern over low rates of natural increase in Japan. Consideration of this diversity is a healthy antidote to a more common emphasis on high rates of growth alone.

The reports themselves range from 13 to 20 pages in length and they are attractively prepared. They are written for a high school audience, but, given the tremendous diversity in college populations, individual instructors should judge the appropriateness of the series for their own students. At the very least, the reports should provide excellent raw material for lectures on the diversity of population "problems" across the world. The series of ten reports and a teacher's guide are available for $3.50 from the American Universities Field Staff, 3 Lebanon Street, Hanover, N.H. 03755. Additional classroom copies are available for 50¢ each with a minimum order of five copies of each title. (A similar series on "The Impact of Modernization on Traditional Societies," is also available at the same price).

Social Education (April 1972)

The April 1972 issue of Social Education (Volume 76, No. 4), the official journal of the National Council for the Social Studies, is devoted to population education and it should become "required reading" for undergraduate teachers of population studies. Under the guest editorship of Stephen Viederman of the Population Council, the issue combines a number of articles on problems of population education, generally directed to elementary and secondary school situations, with an invaluable compendium of source materials on population. It is these materials that make the issue such an important resource for college instructors. For example, there is a 32-page summary of "sources and resources" com-

piled by Kathryn Horsley of the Population Reference Bureau. It includes information on teacher resources, student reading, organizations and agencies, and audio-visual materials related to population. The latter list, including full details and evaluation for more than 30 films, is perhaps the most extensive and best one available. Many other references to teaching materials are sprinkled throughout the journal.

In addition, several articles raise issues of strategy in teaching about population. Selections by Bryon G. Massialas ("Population Education as Exploration of Alternatives"), Robert M. Veatch ("Ethics, Population Policy, and Population Education"), David L. Sills ("Population, Pollution, and the Social Sciences"), Hazel W. Hertzberg ("Population in the New Social Studies"), and Stephen Viederman ("Editorial Reflections on Population Literacy") cover questions that are as important for college teachers to consider as they are for elementary or secondary school educators.

Summer Programs in Population, Cornell University

Two programs directed to college teachers of population-related subjects will be offered at Cornell University this summer under the sponsorship of its International Population Program.

The first program, the Summer Institute in Social Demography and Population Policy, is supported by the National Science Foundation and will provide 25 college and junior college teachers with knowledge and strategies for strengthening instruction in population studies at their respective institutions. It will include (1) a general introduction to social demography, (2) exposure to contemporary research and policy issues in population studies, (3) instruction and laboratory work in the techniques of demographic analysis, and (4) detailed examination of population problems in the United States and various areas of the developing world. The Institute will be conducted from June 26 to August 4, 1972.

The second program is the Summer Workshop for Curriculum Development in Demography and it is supported by the

Population Council through a grant to the National Council of Associations for International Studies and Cornell University. The Workshop will bring together 20 persons interested in developing new classroom strategies and curriculum materials for improving instruction on population at a collegiate level. Attention will be paid to the development of audio-visual and computer materials for use in the classroom and as aids to independent study. The Workshop will also run from June 26 until August 4, 1972.

While the closing dates for applications have passed and all participants for both programs have been selected, information on these programs may still be of interest either for anticipating the products of the Workshop for Curriculum Development or for considering application to similar programs in 1973 if renewed funding is forthcoming. Questions about next year's programs should be addressed in the late Fall to Parker G. Marden, Department of Sociology, Lawrence University, Appleton, Wis. 54911.

AAAS Audiotapes

The American Association for the Advancement of Science records selected sessions at its annual meetings for wider distribution. Over the past several years, these conventions have featured a number of interesting sessions on the relationship between population and environmental and social issues. In 1970, for example, a panel discussion involving Garrett Hardin, Paul Ehrlich, Barry Commoner, and Ansley Coale -- physical or social scientists with conflicting views on the contribution of population growth to environmental difficulties -- was recorded. It is especially valuable because of the opportunity to hear exchanges between these experts rather than unchallenged presentations. This audiotape, "Is Population Growth Responsible for the Environmental Crisis in the United States?" (73/70) is available from the AAAS for $15.00. Audiotapes that also may be of interest include "Is There an Optimum Level of Population?" (10/69, four tapes, $51.00), and "Public Policy for the Environment," (82/70, $15.00). Each tape covers a session of about three hours.

The audiotapes are available from the American Association for the Advancement of Science, 1515 Massachusetts Ave., N.W., Washington, D.C. 20005.

Census Results as Teaching Resources

Now that the results of the 1970 Census of Population are becoming available in printed form and on computer tape, it is appropriate to consider ways in which these results can be utilized in the college classroom. This is especially important because such data are excellent materials for "inquiry education" by which students can gain understanding of social and demographic patterns through their own processes of discovery. In subsequent issues of "Teaching Notes," we hope to explore these possibilities. At present, two publications might be suggested for any teacher interested in such approaches.

First, since there is considerable confusion about availability of census results, timing of release, and format, teachers with questions might wish to consult the 1970 Census Users' Guide, Part 1 and Part 2. This two-part publication is designed to provide most of the information that individuals need to use 1970 census data materials effectively. Part 1 of the Guide includes information on collection and processing of 1970 data, data delivery media (computer tapes, microfilm, and printed materials), maps, and information on how to obtain census materials. Part 1 is published in standard, paper-bound form. Part 2 of the Guide is pre-punched for a three-ring binder and contains appendixes directly related to the use of census summary tapes by computer. The 1970 Census Users' Guide is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20102. Part 1 is priced at $1.25 per copy and Part 2 at $2.75 per copy.

A valuable supplement to this formal information on census data and procedures is available in Research and the 1970 Census issued by the Southern Regional Demographic Group of the Oak Ridge Associated Universities. This volume, edited by Abbot L. Ferris, is the report of a conference held in May 1971. It includes a considerable amount of valuable information on the nature of the 1970 Census, but, more importantly, the papers collected within it raise

a number of interesting questions on research opportunities that can be undertaken with 1970 Census data. Advancing the argument that the most important limit to analysis of the 1970 Census is "the imagination of the investigator," the editor states that the purpose of the volume is to spark that imagination. The 16 papers which are assembled meet this goal very adequately and deserve the attention of any serious student of population questions. Research and the 1970 Census is available from the Secretariat, Southern Regional Demographic Group, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, Tenn. 37830.

NSF Chautauqua Courses for College Teachers

With the support of the National Science Foundation, the American Association for the Advancement of Science will again sponsor a series of Chautauqua-Type Short Courses for College Teachers during the 1972-73 academic year. The objective of the program is to provide new perspectives and materials to college teachers in the natural and social sciences so that they may update their courses or introduce new ones.

Organization of the Chautauqua courses is elaborate as there are 12 Field Centers, each offering ten courses, organized into three "circuits" along which distinguished scientists will travel. The typical pattern for each course will be for participants to meet for two days of lectures, demonstrations, and discussion. This is followed by approximately three months of independent study which, in turn, is followed by a two-day session for discussion and "wrap-up."

Several of the courses offered should be of special interest to persons interested in population problems. Among them are the courses conducted by Murray Felsher ("Man-Technology-Environment: A Problem-Solving Approach"), and Everett Lee ("Cities and People: A Demographic Approach") to be offered in the Eastern Circuit with Field Centers at Hampshire College, University of Maryland (College Park), Syracuse University, and Clark College (Atlanta); the course by Andrei Simic ("Traditional Society and the Impact of Urbanization and Technological Change") to be offered in the Central Circuit with Field Centers at Miami University (Ohio), University of Missouri-Kansas City, University of Wisconsin-Madison, and Louisiana State University; and the

course by George J. Stolnitz ("Population") to be offered in the Western Circuit with Field Centers at the Oregon Graduate Center (Beaverton), Harvey Mudd College, University of Texas-Austin, and Stanford University. This does not exhaust the list of interesting and appropriate topics. The full listing is available from the Education Division, American Association for the Advancement of Science, 1515 Massachusetts Ave., N.W., Washington, D.C. 20005.

"Teaching Notes on Population" is a cooperative effort of the International Population Program at Cornell University and the Foreign Area Materials Center in New York City, which operates under the auspices of the National Council of Associations for International Studies and the New York State Education Department's Center for International Programs and Comparative Studies. The objective of "Teaching Notes" is to strengthen population studies in undergraduate education by sharing information about and experiences with materials and ideas useful in college teaching. Publication of "Teaching Notes" is being supported by a grant to NCAIS from the Population Council.

The International Population Program at Cornell seeks to advance the scientific study of population through graduate training and research. The program also maintains an active interest in furthering education about population in the school and college curriculum. The Foreign Area Materials Center develops materials useful in teaching about foreign areas and world problems, mainly at the undergraduate level. The National Council of Associations for International Studies seeks to strengthen the international dimensions of undergraduate education and is composed of 12 associations of colleges and universities, representing more than 400 institutions from Vermont to Hawaii. The Center for International Programs and Comparative Studies is particularly concerned with improving opportunities in New York State for the study of areas of the world traditionally neglected in American education and with exploring significant aspects of American society in relation to developments elsewhere.

38725